

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Claims.

Sub B1
Q1
10 1. (Amended) A semiconductor device, comprising:

a trench element separation region including a trench formed in a surface of a semiconductor substrate, the trench element separation region isolating separate semiconductor elements;

an oxide film formed on inner walls of the trench;

a trench filling insulating material filling the trench and having edges above the inner walls of the trench that are defined by side edges of a sacrificial layer formed by an etching process including a neutral radical; and

wherein inner wall edges in a top section of the trench and the edges of the trench filling insulating material are formed so as to be essentially located on the same plane.

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Please cancel claim 2. ✓

Q2 Sub C17
3. (Amended) The semiconductor device of claim 1, wherein the sacrificial layer is a silicon nitride film.

Please cancel claim 4. ✓

Sub B220
Q3
25 7. (Amended) A semiconductor device, comprising:

a trench element separation region including a trench formed in a surface of a semiconductor substrate, the trench element separation region isolating a first doped channel layer of a first insulated gate field effect transistor (IGFET) from a second doped channel layer of a second IGFET;

an oxide film formed on inner walls of the trench;

a trench filling insulating material filling the trench and having edges above the inner walls of the trench defined by side edges of a sacrificial layer formed by an etching process including a neutral radical; and

wherein inner wall edges in a top section of the trench and the edges of

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G3
the trench filling insulating material are formed so as to be essentially located on the same plane.

Please cancel claim 8.

SUBC
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9. (Amended) The semiconductor device of claim 7, wherein:
the etching process includes a fluorine radical.